

PEREGRINE FALCON RESTORATION

The peregrine falcon (*Falco peregrinus*) was extirpated as a breeding bird from the eastern U.S. by 1964. In the Midwest, peregrines formerly nested on cliffs along Lake Superior, Lake Michigan and the upper Mississippi River, plus suitable palisade areas. The upper Mississippi River area was the major historic nesting area for peregrines in the Midwest, with an estimated historic population of 30 – 35 pairs (Tordoff 1986). Most of Iowa's historic peregrine nesting occurred on the Mississippi River bluffs of northeastern Iowa in Allamakee, Clayton, Dubuque, and Clinton counties (Anderson 1907, Allert 1939, Pierce 1940), but nesting also occurred on the palisades of the Cedar River in Linn and Johnson counties (Bailey 1918) and along the Cedar River in Black Hawk County (Anderson 1907). A nest was also reported at the mouth of Beaver Creek in Polk County (DuMont 1931). Prior to reintroduction, the last documented nests were noted in 1955 and 1956 at two of six eyries in Allamakee County (Berger and Mueller 1969), although there were reports of a nest with two eggs in Allamakee County in 1964 and a nest with downy young at Blackhawk Point, Allamakee County in 1967 (Roosa and Stravers 1989). Pesticides, specifically DDT, were the primary cause for the dramatic decline in the peregrine population. Until 1998, the peregrine falcon was a federally and state listed endangered species. The bird was federally delisted in 1998, but remains on the state endangered species list.

In an effort to guide recovery of the peregrine falcon to the eastern U.S., an Eastern Peregrine Recovery Plan

(EPRP) was developed. The overall goal of this plan was to establish a viable peregrine falcon population consisting of 175 breeding pairs, which is half of the pre-pesticide population. For each region of the eastern U.S., EPRP set a goal of 20-25 breeding pairs. Iowa falls under the Midwestern and Great Lakes regional plan (MGLRP). As part of the MGLRP, Iowa set a goal of establishing 5 breeding pair by the year 2000 with an ultimate goal of 10 breeding pair for a viable population. To achieve this goal, the Wildlife Diversity program planned to release 55 peregrines in the first 5 years. The "magic number" of birds released to get one breeding pair return is about 13. A maturing bird is expected to return to a release site within 2-3 years after release and establish a territory within that area. As a result, no release site will be used for more than 2 years to avoid confrontations with adult falcons and hack birds.

Iowa's Peregrine Falcon Restoration project began in 1989 with the release of 10 (2F,8M) birds in Cedar Rapids from the Telecom USA building. There was one mortality during this first release when a bird collided with a building. Releases continued for the second year at the Cedar Rapids release site with 13 falcons (3F,10M) in 1990. Two of these birds, 1 male and 1 female, died as a result of collisions with buildings. During the 1990 hacking process a subadult male (T6?- apparently from 1989 C.R. release) showed up in Cedar Rapids and regularly interacted with hacked birds.

In 1991, a second release site was selected for the third year of the project. A total of 19 birds (8F,11M)

were released in 1991 at the First Baptist Foundation of the Elsie Mason Manor in Des Moines. Similar to the 1991 Cedar Rapids release, a subadult male (T93-from 1990 Cedar Rapids release) appeared for a brief period of time. Little to no aggressive interactions were observed between this subadult and the hacked falcons. During 1991, peregrines were observed in Cedar Rapids, Davenport and Keokuk; however, no nests were located. A second release was not attempted at the Des Moines site during 1992 because two falcons attempted to nest on the American Republic Insurance building. The female (R13 – Kansas City 1991) laid 5 eggs total. One egg rolled off the alcove ledge and another was cracked. The 3 remaining eggs were laid in a different alcove and never incubated. The male at this site was X20 from the 1990 Cedar Rapids release. This was the first nesting attempt in Iowa in nearly 30 years.

Elsewhere in the state during 1992, falcon pairs established two additional territories. A male falcon in Cedar Rapids successfully attracted a mate in mid-May, but it was too late in the season for breeding. The pair engaged in courtship flights and investigated the nest box on the Firststar Bank building, but did not actually attempt to nest. In the Quad Cities, a pair appeared to be incubating eggs under the Centennial Bridge; however, there were no observations of feeding in late-June. The site was investigated in September, but no eggs, egg fragments, dead young or even a definitive nest site was found.

The third release site chosen for releases in 1992 (the 4th year of the project) was Davenport. However, the arrival of a falcon pair precluded this site

from release since the territorial adults could potentially harm the young hacked birds. As a result, 8 birds (2F,6M) were released from the Laurel Building in Muscatine during 1992. A male Cedar Rapids bird (T95 – 1990) appeared after the hacked birds fledged. T95 engaged in mock combat with the young and occasionally harassed them at the hack site, but he did not harm any of the young. Of the 8 birds released at Muscatine, 2 died, both males.

In 1993, there was much falcon activity across the state. We had 2 successful peregrine falcon nests in Iowa. The falcon pair returning to the American Republic Insurance building was the same male (X20) and female (R13) who attempted to nest in 1992. Shortly after their return, the male (X20) was found decapitated after a three-bird territorial dispute. The “winning” male did not remain in the area. The female (R13) eventually mated successfully with a third male, T93 (from 1990 Cedar Rapids release), that came to Des Moines. This pair successfully hatched and raised 3 young. In early July, one of these young was found dead in the air conditioning unit of the American Republic Insurance Building.

The second successful nest occurred in Cedar Rapids. The male was identified as X64 (Des Moines – 1991) and the female as R49 (Des Moines – 1991). This pair laid 4 eggs and hatched 2. Of the two young, one died of exposure from stormy weather. The Iowa Falconer’s Association donated a young male to foster into the nest. The adults accepted the “implant” along with the remaining female chick. Both young fledged successfully from the nest.

A third nesting occurred in Iowa during 1993 at the Centennial Bridge in

Davenport. A pair was observed demonstrating nesting behavior, but that soon changed about the time young should hatch. Closer observation of the nest site did not reveal young or eggs, however, a possible scrape was located along with falcon prey remains. A decomposed body of a female falcon (W24 – Kenosha, WI) was found trapped in the I-beam of the bridge. It is possible that this bird was the nesting female. Once she became trapped, the male abandoned the nest and attracted a new female (R95 – Colonnade, MN). By this time, it was too late in the season for nesting.

At Muscatine, a single male (C/M – Muscatine, 1992) returned to the site, but did not attract a mate. Because of the return of this bird, a second release was not made at this site.

During 1994, two falcon pairs nested successfully, marking the second year in a row for nest success. The birds at Firststar Bank in Cedar Rapids were the same, R49 and X64. They laid and hatched 4 eggs (2F,2M), but one female died soon after hatching. Another chick was treated for trichomoniasis (Frounce) and released. All three young fledged successfully. The second successful nest was at the same site in Des Moines – the American Republic Insurance building. This pair was also the same birds from 1993, R13 and T93. Their first nesting attempt on the eastside of the building was unsuccessful as one egg rolled off the ledge and the other 2 eggs were abandoned. The birds moved to the west side where they laid and hatched three young (1F,2M), all of which fledged successfully. The young female later died as a result of a collision with a building and one young male died of unknown causes. There was no known nesting attempts at either

Davenport or Muscatine, however, a bird was observed during the winter at the Centennial Bridge in Davenport.

The original goal established by EPRP of 20-25 nesting pair was met and replaced with a new regional goal of 40 territorial pairs. This new goal was met and surpassed in 1993. By 1994, the midwestern region had 61 territorial pairs with 41 successfully nesting. As a result of meeting the regional goal, many states tapered off falcon releases. However, Iowa's goal of establishing 5 nesting pairs by the year 2000 did not look promising without further releases. Furthermore, many did not consider the midwestern population recovered since there was very little nesting on natural eyries aside from cliffs in northern Minnesota and Michigan.

In order to address the need for more releases in Iowa, a Peregrine Falcon Recovery Team (PFRT) was formed to continue releases with the hope of establishing a sustainable peregrine population that requires little or no maintenance or manipulation. The (PFRT) hoped to continue urban releases in strategic locations along the Mississippi and inland along known flyways. The group would also evaluate the possibility of releasing birds along the cliffs of NE Iowa.

The 2 falcon pairs in Cedar Rapids and Des Moines nested successfully once again in 1995, marking the third consecutive successful nesting season in Iowa. The Cedar Rapids pair produced four eggs and hatched three young (1F,2M). All three young fledged successfully. One male was later found dead as a result of a collision. The Des Moines pair laid four eggs and hatched three females, all of which fledged successfully.

Iowa has been able to maintain

its two nesting falcon pairs in Des Moines and Cedar Rapids. Regionally during 1996, there were 87 territorial pairs of which 45 nested successfully. The Cedar Rapids pair (still the same male and female) again produced 3 birds (1F,2M), one egg did not hatch. All 3 birds fledged successfully. The Des Moines pair hatched 3 young, but one mysteriously disappeared leaving only 2 males to fledge successfully. This year marked the start of additional falcon releases with the hopes of achieving the goal of 5 breeding pair by the year 2000. The Peregrine Falcon Recovery Team, who generated the funding and volunteers to conduct the releases, spearheaded these releases. Mason City released 7 birds total (3F,4M), two of which (both females) came from Iowa City during the hacking process. Iowa City was in the process of hacking 3 birds (2F,1M), when a wild peregrine showed up at the release site and killed the male. The two remaining females were transported to Mason City to fledge for safety of the birds. There were no releases at Burlington due to mortality prior to placing the birds in the hack box.

The falcon project met with mixed success in 1997. Both falcon pairs returned to nest in Cedar Rapids and Des Moines, however, the Des Moines pair exhibited problems. The female laid her eggs in an alcove on the American Republic Insurance Building that did not have pea gravel in the bottom, so the eggs got wet. We put gravel in, but it was too late. The female abandoned the eggs. She did, however, lay 2 eggs in another alcove and 1 in yet another. To facilitate incubation, we moved the lone egg in with the 2, but later one was kicked out of the scrape, one was cracked and the other was

abandoned. Two of the 6 eggs were sent for analysis to try and provide answers for the aberrant behavior of the Des Moines female. On the bright side, the Cedar Rapids pair laid 4 eggs and successfully fledged 2 (both males). Elsewhere in the state, the PFRT continued releases at the Mason City site with 3 young (1F,2M), one of which died from injuries received after colliding with a fence. Iowa City did not release birds in 1997, but Bob Anderson started his efforts of releasing birds on the natural eyries of NE Iowa. He released 4 birds in 2 batches of two (2F,2M) at a hack site situated on the cliffs overlooking the Iowa River near Bluffton. Two of the birds were equipped with radio transmitters, but were not tracked successfully for very long due to the topography interfering with the transmission of the signals.

Things were back on track for 1998. Both falcon pairs nested successfully in Cedar Rapids and Des Moines. The Des Moines pair produced 3 young (1F,2M) as did the Cedar Rapids pair (2F,1M). There was no evidence of additional eggs in Des Moines, however, there were 5 eggs in Cedar Rapids. As for other releases in the state, Mason City concluded its final peregrine release in 1998, sending off 15 falcons (4F,11M) without a hitch and Louisa had its first release with 4 young (3F,1M). Bob Anderson continued his cliff-site releases in 1998. However, he changed the release site from Bluffton to Effigy Mounds National Monument. The latter location is an exceptional bluff overlooking the Mississippi River. Two pseudo-rocked hack boxes were mounted on the bluff face. A total of nine birds (5F,4M) were released from the sight. Radio transmitters on the birds indicated no mortality up to dispersal.

Unfortunately, two of the Effigy Mounds birds died during the spring of 1999 due to a possible collision and a drowning.

The Peregrine Falcon Recovery Project had a slight change in direction during 1997. The decision was made to no longer allow urban releases, except for two grandfathered sites that already had the steps in motion for 1998 releases. Those grandfathered sites were Mason City and Louisa. The Mason City site releases were completed with the hacking of 15 falcons in 1998, and Louisa continued releases through 2000. The reasoning behind this decision was that the transition of falcons nesting in urban areas to natural cliff sites was not occurring as originally thought. In fact, some studies indicate that urban birds may actually be hindering wild nesting since falcons attract falcons. In an effort to return falcons to their historic nesting eyries in Iowa, the Iowa DNR has prioritized cliff-site releases.

Falcon production had mixed success again in 1999. On a down note, the Des Moines pair did not produce any young. The American Republic Insurance Building, where the birds nest, was getting a new roof. Rainy weather pushed construction into peak nesting time, causing too much disturbance for the breeding adults. Cedar Rapids was still a production stronghold with 3 young fledging in 1999. On a positive note, 1999 produced Iowa's third nesting falcon pair at a power smokestack in Lansing. The adults, both from Minnesota successfully produced 3 young (1F,2M). Falcons have been sighted in Mason City, but no nest attempts were documented.

Release efforts continued in Iowa during 1999. Louisa released 8 birds in their second release year. The Raptor Resource Project, headed by Bob

Anderson, was awarded a grant by the Iowa DNR to continue release efforts at Effigy Mounds National Monument. He released 9 falcons in 1999. Bob was also granted a FWS permit to take chicks from smokestack nests and release them at cliff sites along the Mississippi River. A new cliff release site was added in 1999. This site, at Eagle Point Park in Dubuque, is also along the Mississippi River. Two rock-lined hack boxes were placed on a bluff overlooking the river. Volunteers released 21 falcon chicks (5F,16M) in 1999 from this site.

In 2000, for the first time in at least 3 decades, wild peregrines were produced on Mississippi River cliffs. At Queen's Bluff, in southeastern Minnesota, 1 young fledged successfully from parents which had been released in Iowa. The female was hacked from Mason City in 1998, and the male was hacked from Effigy Mounds in 1998. In all, there were 5 pairs of peregrines at cliff-sites along the Mississippi River. Thanks to efforts by Bob Anderson, the same pair that nested in 1999 in a nest-box at the Alliant Energy power plant smokestack near Lansing, now nested in a nest-box at a nearby cliff, where peregrines historically nested. They fledged 4 young (3M,1F), but the young female died post fledging. It is worth noting that, according to Bud Tordoff (Tordoff et al 2000), "these were the first young peregrines known to fledge from a cliff nest in the Mississippi River valley since the extirpation of the original population by DDT in the 1950s and 1960s."

Urban nest sites were also successful in 2000. At the American Republic Building in Des Moines, 9-year-old female 13R, nesting here for the eighth year, paired again with 10-year-old male 93T, his seventh year at the

site. They produced 4 eggs and fledged 2 male young. In Cedar Rapids at the Firststar Bank nest site, a 2-year-old female, *S/*5 (fledged in Des Moines in 1998) replaced female R49. She mated with 11-year-old male 64X, here for the eighth year. They produced 4 eggs and fledged 4 young (3M,1F). Besides the 3 successful nests, there was also a peregrine pair reported in April at the smokestack nest box at the Louisa Mid-American power plant. Also reported was a 1999 Louisa released male (wearing black/green band) frequenting the MidAmerican Energy Co. building in Davenport, and a peregrine with a gold band on the right leg and a red/black band on the left leg was reported in Burlington on July 1 by Conservation Officer, Don Simonson.

Mississippi River peregrine releases continued in 2000, with 19 falcons hacked at the Dubuque cliff site and 6 male peregrines hacked at the Louisa power plant site. All told, there were 164 peregrines hacked from Iowa release sites from 1989-2002. Eighty-four of these birds were released along the Mississippi River, and 62 peregrines were released off limestone bluffs.

Year 2001 saw 5 Iowa peregrine territories. The same returning nesting pairs were identified at Des Moines, Cedar Rapids, and Lansing. The Des Moines pair produced 4 eggs and fledged 3 young (2M,1F). The young female later died after colliding with a window. There were 3 eggs laid and 3 young females fledged at Cedar Rapids. The Lansing pair attempted to nest unsuccessfully on a cliff, and finally laid 4 eggs (which did not hatch) in a nest box. An unidentified pair of peregrines attempted to nest beneath the Centennial Bridge in Davenport. The female is a sub-adult wearing a black/green band,

and it is not known if the male is banded. Young falcons were heard food-begging beneath the bridge, but it is not known if any young fledged successfully (unverified report indicated two). A fifth pair of falcons held a nesting territory at the Louisa Generating Station smokestack nest-box. The female hatched in 1999 from a smokestack box in Minneapolis, and the male has not been identified. The stage is set for 5 nesting pairs in 2002.

In 2002 six falcon territories were reported with five sites successfully fledging young. At Cedar Rapids four-year-old female *S/*5, nesting here for the third time, and thirteen-year-old male 64X (identified previously as 64T), here for the tenth year, produced four eggs, hatched three and fledged two females and a male.

The Des Moines pair once again laid three eggs on the eastside of the American Republic Insurance bldg. However, the eggs disappeared as hatch date drew near. In late June an egg was discovered on the westside of building which hatched. A lone male was banded July 30 and successfully fledged in early August.

The Lansing cliff site was active in 2002 where the same pair successfully fledged two young, a male and a female. The adult female X/*D, fledged in 1998 at NSP Sherco, Becker, Minnesota and here for the first time, paired with five-year-old male *T/M, nesting here for the fourth year. The falcon box on the bluff, across from the Alliant Energy plant placed by Bob Anderson was a suitable backdrop as historic falcon banders gathered to assist and witness event. It had been 44 years since Dan Berger, Jack Oar, Jim Grier, Jack Oberg, Dave Seal, and Chuck Sindelar banded falcons at historic eyries. This year they were

assisted by Dave Kester, banding two young (1F,1M) at the site.

In the Quad Cities the pair that previously occupied the Centennial Bridge nested in a falcon box placed by falconer, Tom Deckert. Three-year-old female 8/*E, hacked in 1999 at Muncie, Indiana paired with three-year-old male P/D, hacked in 1999 at Dubuque, Iowa. The MidAmerican Energy staff, Joe Bannon and Dave Sebben hosted three young, two females and a male in downtown Davenport. All successfully fledged with minimal intervention from humans.

A new falcon site came on line this year. A box affixed to the smokestack of the Louisa Generating Station near Muscatine was used. MidAmerican Energy staff headed by Jim Haack had released 18 young at the site from 1998-2000. The female, Z/V, fledged in 1999 at NSP Riverside, Minneapolis, Minnesota. The tiercel has not been identified. Three eggs were laid, two hatched, and one young male successfully fledged.

A sixth falcon territory occurred at the Holnam Cement Plant at Mason City. Falconer Lowell Washburn who hacked 25 young from the site between 1996 – 1998, reported a male was seen intermittently throughout the summer.

Also in 2002 eight young falcons were hacked at the Duane Arnold nuclear facility near Palo, Iowa. Bob Anderson with Raptor Research Project coordinated the placement of four young. Meanwhile four young at a smokestack box near Alma, Minnesota were stranded when an untimely death of the adult male occurred at that site. Plus, the female was discovered injured and unable to provide for young. The four were relocated to the Palo site and

all eight successfully fledged, due to efforts spearheaded by Bob Anderson.

In 2003 there were seven territories in Iowa. Mason City territory at Holnam Plant was inactive, but two new territories occurred in Iowa. Falcon activity was noted at nestbox at Alliant Plant near Chillicothe in Wapello Co. An adult peregrine was observed and a scrap was created in nestbox. At Quad Cities under I-80 bridge, a fledgling falcon was photographed and according to falconer Lowell Washburn an eyrie was presumed to have occurred under bridge. Adults were not identified at either site.

At Des Moines same adults fledged four young from second, NW alcove of American Republic building. At Cedar Rapids same adults fledged four young. At Louisa female Z/V and unknown male fledged three young.

Near Lansing the wild pair attempted to nest on a natural ledge. Two young hatched but had disappeared by banding time. Falconers Bob Anderson and Dave Kester believed raccoon predation destroyed nest. Raccoon sign was observed in area and access by land was possible.

Quad Cities female 8/*E and unidentified male produced four young under Centennial bridge. Young were relocated to natural bluff near Bluffton and hacked by Bob Anderson. All four survived and were observed throughout summer.

Iowa falcons produced at least 16 young this year making it a banner year for falcon production.

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Table 6.1. Peregrine falcons released in Iowa as part of the Midwestern Peregrine Recovery Project.

(Year summaries prior to the first year given are archived at <http://www.iowadnr.com/wildlife/>)

Year	Location	USFWS #	Color Band	Sex	Comments
2000	Louisa	1807-77704	G/T	M	
2000	Louisa	2206-47604	07/H	M	
2000	Louisa	2206-47605	08/H	M	
2000	Louisa	2206-47606	09/H	M	
2000	Louisa	2206-47628	10/H	M	
2000	Louisa	2206-28925	N/N	M	
2000	Dubuque	1807-53920	3/*V	F	
2000	Dubuque	1807-53921	1/*P	F	
2000	Dubuque	1807-53922	4/*V	F	
2000	Dubuque	1807-53923	7/*1	F	
2000	Dubuque	1807-53932	0/*A	F	
2000	Dubuque	1807-53933	4/*B	F	
2000	Dubuque	2206-28909	K/B	M	
2000	Dubuque	2206-35847	N/P	M	
2000	Dubuque	--	--	-	Rehab bird
2000	Dubuque	--	--	-	Rehab bird
2000	Dubuque	2206-35848	S/E	M	
2000	Dubuque	2206-35849	U/W	M	
2000	Dubuque	2206-35850	00/H	M	
2000	Dubuque	2206-47622	01/H	M	
2000	Dubuque	2206-47623	03/H	M	
2000	Dubuque	2206-47624	02/H	M	
2000	Dubuque	2206-47625	04/H	M	
2000	Dubuque	2206-47626	05/H	M	
2000	Dubuque	2206-47627	06/H	M	
2002	Palo	1807-77717	6/*3	F	
2002	Palo	2206-62813	60/K	M	
2002	Palo	2206-62803	61/K	M	
2002	Palo	2206-62812	62/K	M	
2002	Palo	1807-91977	46/B	F	Wild bird from Alma
2002	Palo	1807-91978	47/B	F	Wild bird from Alma
2002	Palo	2206-47682	19/M	M	Wild bird from Alma
2002	Palo	2206-47683	20/M	M	Wild bird from Alma
2003	Bluffton	2206-69873	69/P	M	Wild bird from Centennial Bridge
2003	Bluffton	1807-62159	43/E	F	Wild bird from Centennial Bridge
2003	Bluffton	1807-62160	44/E	F	Wild bird from Centennial Bridge
2003	Bluffton	1807-62161	45/E	F	Wild Bird from Centennial Bridge

Table 6.2 Young peregrine falcons produced from Iowa nesting pairs.

Year	Location	USFWS#	Young	Sex	Falcon	Teircel	Comments
2000	Lansing	1807-77669	3/*7	F	6*/V Minneapolis '97	T*/M Prairie Isle MN '97	Found dead inside smokestack
2000	Lansing	2206-28979	K/D	M	6*/V Minneapolis '97	T*/M Prairie Isle MN '97	
2000	Lansing	2206-28980	G/D	M	6*/V Minneapolis '97	T*/M Prairie Isle MN '97	
2000	Lansing	2206-28981	M/C	M	6*/V Minneapolis '97	T*/M Prairie Isle MN '97	
2000	Cedar Rapids	1807-34737	1/*9	F	*S/*5 Des Moines 1998	X64 Des Moines '91	
2000	Cedar Rapids	1807-34738	2/*T	M	*S/*5 Des Moines 1998	X64 Des Moines '91	Died after window collision
2000	Cedar Rapids	2206-62744	21/H	M	*S/*5 Des Moines 1998	X64 Des Moines '91	
2000	Cedar Rapids	2206-62745	20/H	M	*S/*5 Des Moines 1998	X64 Des Moines '91	
2000	Des Moines	2206-62746	22/H	M	R13 Kansas City 1991	T93 Cedar Rapids 1990	
2000	Des Moines	2206-62746	22/H	M	R13 Kansas City 1991	T93 Cedar Rapids 1990	
2001	Des Moines	1807-35917	55/A	F	R13 Kansas City 1991	T93 Cedar Rapids 1990	
2001	Des Moines	2206-62842	19/K	M	R13 Kansas City 1991	T93 Cedar Rapids 1990	
2001	Des Moines	2206-62843	20/K	M	R13 Kansas City 1991	T93 Cedar Rapids 1990	
2001	Cedar Rapids	1807-35918	56/A	F	*S/*5 Des Moines 1998	X64 Des Moines '91	
2001	Cedar Rapids	1807-35919	57/A	F	*S/*5 Des Moines 1998	X64 Des Moines '91	
2001	Cedar Rapids	1807-35920	58/A	F	*S/*5 Des Moines 1998	X64 Des Moines '91	
2002	Quad Cities	2206-47678	12/M	M	8/*E Muncie, IN 1999	P/D Dubuque 1999	
2002	Quad Cities	1807-91965	35/B	F	8/*E Muncie, IN 1999	P/D Dubuque 1999	
2002	Quad Cities	1807-91966	36/B	F	8/*E Muncie, IN 1999	P/D Dubuque 1999	
2002	Cedar Rapids	1807-91959	28/B	F	*S/*5 Des Moines 1998	X64 Des Moines '91	
2002	Cedar Rapids	1807-91958	29/B	F	*S/*5 Des Moines 1998	X64 Des Moines '91	
2002	Cedar Rapids	2206-47671	05/M	M	*S/*5 Des Moines 1998	X64 Des Moines '91	
2002	Louisa G. Station	2206-47673	06/M	M	Z/V Riverside, MN 1999	? 	
2002	Des Moines	2206-47673	07/M	M	R13 Kansas City 1991	T93 Cedar Rapids 1990	
2002	Lansing bluff	2206-62877	16/M	M	6*/V Minneapolis '97	T*/M Prairie Isle MN '97	
2002	Lansing bluff	1807-91975	44/B	F	6*/V Minneapolis '97	T*/M Prairie Isle MN '97	

Year	Location	USFWS#	Young	Sex	Falcon	Teircel	Comments
2003	Cedar Rapids	220-649456	83/M	M	S*/5*	64X	
					Des Moines '98	Des Moines '91	
2003	Cedar Rapids	220-649457	84/M	M	S*/5*	64X	
					Des Moines '98	Des Moines '91	
2003	Cedar Rapids	220-649458	85/M	M	S*/5*	64X	
					Des Moines '98	Des Moines '91	
2003	Cedar Rapids	987-40129	01/D	F	S*/5*	64X	
					Des Moines '98	Des Moines '91	
2003	Louisa	987-40130	07/D	F	Z/V	Unknown	
					Riverside, MN '99		
2003	Louisa	987-40131	08/D	F	Z/V	Unknown	
					Riverside, MN '99		
2003	Louisa	220-649459	86/M	M	Z/V	Unknown	
					Riverside, MN '99		
2003	Des Moines	987-40141	92/B	F	R13	93T	Found dead in July at 801 Grand
					Kansas City '91	Cedar Rapids '90	
2003	Des Moines	987-40142	93?b	F	R13	93T	
					Kansas City '91	Cedar Rapids '90	
2003	Des Moines	2206- 494468	14M	M	R13	93T	
					Kansas City '91	Cedar Rapids '90	
2003	Des Moines	2206- 494468	15N	M	R13	93T	
					Kansas City '91	Cedar Rapids '90	
2003	Quad Cities	1807-62159	43/E	F	8/E*	Unknown	Hacked at Bluffton
					Muncie, IN '99		
2003	Quad Cities	1807-62160	44/E	F	8/E*	Unknown	Hacked at Bluffton
					Muncie, IN '99		
2003	Quad Cities	1807-62161	45/E	F	8/E*	Unknown	Hacked at Bluffton
					Muncie, IN '99		
2003	Quad Cities	2206-69873	69/P	M	8/E*	Unknown	Hacked at Bluffton
					Muncie, IN '99		

Figure 6.2. Young Peregrine falcons produced from known Iowa nesting pairs 1993 - Present.

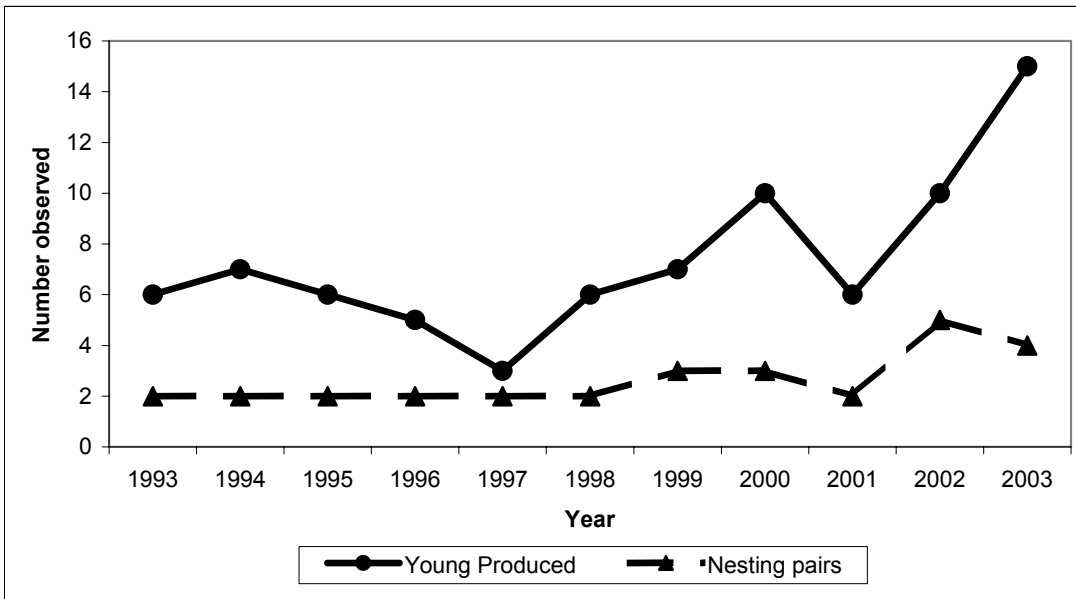


Table 6.3. Evidence of nesting and survival of released or hatched Iowa peregrine falcons.

Year Hatched	Release Site	Band #	Sex	Comments
1989	Cedar Rapids	V52	F	Nested in Winnipeg, ('91-2001)
1989	Cedar Rapids	T63	M	Nest attempt in Cedar Rapids ('92)
1989	Cedar Rapids	V81	F	Nested in Minneapolis (1991-1994)
1989	Cedar Rapids	T64	M	Nesting in Cedar Rapids since 1993
1990	Cedar Rapids	V93	F	Killed by another peregrine in Minneapolis July '91
1990	Cedar Rapids	X20	M	Nested in Des Moines in '92; Killed by another peregrine in Des Moines in 1993.
1990	Cedar Rapids	T93	M	Spent summer 1991 in DSM. Nested in St. Louis in '92; Nesting in Des Moines (1993-2001).
1990	Cedar Rapids	T94	M	Nested in Sherburne Cty, MN ('92-'93); also mated w/F in Monticello, MN in '93
1990	Cedar Rapids	T95	M	Observed at Muscatine hack site in '92
1990	Cedar Rapids	V81	F	Nested in Hennepin Cty, MN ('91-'94)
1991	Cedar Rapids	R49	F	Nested in Cedar Rapids (1993-1999).
1991	Des Moines	R33	F	Nested at Woodmen Tower in Omaha, NE in 1992-1993; killed by PF 3/29/94.
1991	Des Moines	R28	F	Nested in Topeka, KS in '93 – '94
1991	Des Moines	R47	F	At Perry Lake, KS Oct. '91; dead in Topeka, KS 6/93.
1992	Muscatine	C/M	M	At Muscatine nestbos in May '93; dead near East Chicago, IN 4/19/96.
1992	Muscatine	2/3	F	Nested in St. Louis in '93 -'94
1992	Muscatine	2/2	F	Nested in La Crosse, WI in '93, observed unpaired in same location in '94
1994	Cedar Rapids	K/*6	M	Died from window collision in Chicago, IL June 1996.
1994	Cedar Rapids	E/C	F	Nested at Redwing, MN in 1995
1994	Des Moines	M/*6	F	Caught 30 km south of Mexico City, Mexico on 3/15/95.
1996	Mason City	*5/T	F	Nested on Dairyland Powerplant stack at Alma, WI (1997-2001).
1998	Mason City	*7/K	M	Nesting in Rochester, MN in 2000
1998	Mason City	*3/*5	M	Nesting in LaCrosse, WI in 2000
1998	Mason City	*C/*P	F	Nesting on Queen's Bluff, MN in 2000-2001
1998	Effigy Mounds	*E/W	M	Nesting on Queen's Bluff, MN in 2000-2001
1998	Des Moines	*S/*5	F	Nesting at Cedar Rapids Firstar Bank (2000-2001)
1999	Effigy Mounds	X/B	F	Nesting at LaCrosse, WI in 2000

Year Hatched	Release Site	Band #	Sex	Comments
1999	Louisa	??	M	Reported by Tom Deckert on Mid-American Energy bldg., Spring 2000
1999	Cedar Rapids	*E/*V	F	Seen by Steve Dinsmore at power plant S. of Council Bluffs 5/11/2000. Nesting on Woodman Tower, Omaha, NE in 2001.
1999	Dubuque	G/V	M	Nesting at Cassville, WI smokestack box in 2000
1999	Cedar Rapids	*E/*W	F	Nesting on bluff at Maiden Rock, WI in 2000
1999	Dubuque	P/D	M	Nesting on MidAmerican Energy bldg. In Quad Cities
1999	Dubuque	G/V	M	Nesting at Cassville, WI smokestack box in 2000

* Indicates number or letter is horizontal on band

Dual color bands for young are black over red, with black listed first (1993-1999); black over green (2000-2001 & some 1999).